SEQUENCE LISTING

<110> Aventis Behring GmbH

120> Mutants of factor VII-activating protease methods for the detection and use thereof

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SEQ ID No. 1

<130> 2000/A008 - A7

<140>

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<170> PatentIn Ver. 2.1

<210>

<211> 1683

<212> DNA

<213> Homo sapiens

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<210> 2 <211> 1683

<212> DNA <213> Homo sapiens

<400> 2

SEQ ID No. 2

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<400> 3

SEQ ID No. 3

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Leu Asp Pro Asp Trp Thr Pro Asp Gln Tyr Asp Tyr Ser Tyr Glu Asp 35 40 45

Tyr Asn Glu Glu Asn Thr Ser Ser Thr Leu Thr His Ala Glu Asn 50 55 60

Pro Asp Trp Tyr Tyr Thr Glu Asp Gln Ala Asp Pro Cys Gln Pro Asn 65 70 75 80

- Pro Cys Glu His Gly Gly Asp Cys Leu Val His Gly Ser Thr Phe Thr 85 90 95
- Cys Ser Cys Leu Ala Pro Phe Ser Gly Asn Lys Cys Gln Lys Val Gln 100 105 110
- Asn Thr Cys Lys Asp Asn Pro Cys Gly Arg Gly Gln Cys Leu lle Thr 115 120 125
- Gln Ser Pro Pro Tyr Tyr Arg Cys Val Cys Lys His Pro Tyr Thr Gly 130 135 140
- Pro Ser Cys Ser Gln Val Val Pro Val Cys Arg Pro Asn Pro Cys Gln 145 150 155 160
- Asn Gly Ala Thr Cys Ser Arg His Lys Arg Arg Ser Lys Phe Thr Cys 165 170 175
- Ala Cys Pro Asp Gln Phe Lys Gly Lys Phe Cys Glu lle Gly Ser Asp \$180\$ \$185\$ \$190
- Asp Cys Tyr Val Gly Asp Gly Tyr Ser Tyr Arg Gly Lys Met Asn Arg $195 \hspace{1cm} 200 \hspace{1cm} 205 \hspace{1cm} 205 \hspace{1cm}$
- Thr Val Asn Gln His Ala Cys Leu Tyr Trp Asn Ser His Leu Leu Leu 210 220
- Gln Glu Asn Tyr Asn Met Phe Met Glu Asp Ala Glu Thr His Gly Ile 225 230 235 240
- Gly Glu His Asn Phe Cys Arg Asn Pro Asp Ala Asp Glu Lys Pro Trp 245 250 255
- Cys Phe IIe Lys Val Thr Asn Asp Lys Val Lys Trp Glu Tyr Cys Asp $260 \hspace{1cm} 265 \hspace{1cm} 270 \hspace{1cm}$
- Val Ser Ala Cys Ser Ala Gin Asp Val Ala Tyr Pro Glu Giu Ser Pro 275 280 285
- Thr Glu Pro Ser Thr Lys Leu Pro Gly Phe Asp Ser Cys Gly Lys Thr 290 295 300
- Glu lle Ala Glu Arg Lys lle Lys Arg lle Tyr Gly Gly Phe Lys Ser 305 310 315 320

- Thr Ala Gly Lys His Pro Trp Gln Ala Ser Leu Gln Ser Ser Leu Pro 325 330 335
- Leu Thr Ile Ser Met Pro Gln Gly His Phe Cys Gly Gly Ala Leu Ile 340 345 350
- His Pro Cys Trp Val Leu Thr Ala Ala His Cys Thr Asp Ile Lys Thr 355 360 365
- Arg His Leu Lys Val Val Leu Gly Asp Gln Asp Leu Lys Lys Glu Glu 370 375 380
- Phe His Glu Gln Ser Phe Arg Val Glu Lys Ile Phe Lys Tyr Ser His 385 390 395 400
- Tyr Asn Glu Arg Asp Glu IIe Pro His Asn Asp IIe Ala Leu Leu Lys 405 410 415
- Leu Lys Pro Val Asp Gly His Cys Ala Leu Glu Ser Lys Tyr Val Lys 420 425 430
- Thr Val Cys Leu Pro Asp Gly Ser Phe Pro Ser Gly Ser Glu Cys His 435 440 445
- lle Ser Gly Trp Gly Val Thr Glu Thr Gly Lys Gly Ser Arg Gln Leu 450 455 460
- Leu Asp Ala Lys Val Lys Leu IIe Ala Asn Thr Leu Cys Asn Ser Arg 465 470 475 480
- Gln Leu Tyr Asp His Met IIe Asp Asp Ser Met IIe Cys Ala Gly Asn 485 490 495
- Leu Gln Lys Pro Gly Gln Asp Thr Cys Gln Gly Asp Ser Gly Gly Pro 500 505 510
- Leu Thr Cys Glu Lys Asp Gly Thr Tyr Tyr Val Tyr Gly lle Val Ser 515 520 525
- Trp Gly Leu Glu Cys Gly Lys Arg Pro Gly Val Tyr Thr Gln Val Thr 530 535 540
- Lys Phe Leu Asn Trp IIe Lys Ala Thr IIe Lys Ser Glu Ser Gly Phe 545 550 555 560

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<211> 560

<212> PRT

<213> Homo sapiens

<400> 4

SEQ ID No. 4

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Val Gly Lys Thr Ala Cys Gly Phe Ser Leu Met Ser Leu Leu Glu Ser 20 25 30

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Tyr Asn Gln Glu Glu Asn Thr Ser Ser Thr Leu Thr His Ala Glu Asn 50 60

Pro Asp Trp Tyr Tyr Thr Glu Asp Gln Ala Asp Pro Cys Gln Pro Asn 65 70 75 80

Pro Cys Glu His Gly Gly Asp Cys Leu Val His Gly Ser Thr Phe Thr 85 90 95

Cys Ser Cys Leu Ala Pro Phe Ser Gly Asn Lys Cys Gln Lys Val Gln 100 105 110

Asn Thr Cys Lys Asp Asn Pro Cys Gly Arg Gly Gln Cys Leu lie Thr 115 120 125

Gln Ser Pro Pro Tyr Tyr Arg Cys Val Cys Lys His Pro Tyr Thr Gly 130 135 140

Pro Ser Cys Ser Gin Val Val Pro Val Cys Arg Pro Asn Pro Cys Gin 145 150 155 160

Asn Gly Ala Thr Cys Ser Arg His Lys Arg Arg Ser Lys Phe Thr Cys 165 170 175



- Ala Cys Pro Asp Gln Phe Lys Gly Lys Phe Cys Glu lle Gly Ser Asp 180 185 190
- Asp Cys Tyr Val Gly Asp Gly Tyr Ser Tyr Arg Gly Lys Met Asn Arg 195 200 205
- Thr Val Asn Gln His Ala Cys Leu Tyr Trp Asn Ser His Leu Leu Leu 210 215 220
- Gln Glu Asn Tyr Asn Met Phe Met Glu Asp Ala Glu Thr His Gly Ile 225 230 235 240
- Gly Glu His Asn Phe Cys Arg Asn Pro Asp Ala Asp Glu Lys Pro Trp 245 250 255
- Cys Phe lle Lys Val Thr Asn Asp Lys Val Lys Trp Glu Tyr Cys Asp 260 265 270
- Val Ser Ala Cys Ser Ala Gln Asp Val Ala Tyr Pro Glu Glu Ser Pro 275 280 285
- Thr Glu Pro Ser Thr Lys Leu Pro Gly Phe Asp Ser Cys Gly Lys Thr 290 295 300
- Glu lle Ala Glu Arg Lys lle Lys Arg lle Tyr Gly Gly Phe Lys Ser 305 310 315 320
- Thr Ala Gly Lys His Pro Trp Gln Ala Ser Leu Gln Ser Ser Leu Pro $325 \hspace{1cm} 330 \hspace{1cm} 335$
- Leu Thr Ile Ser Met Pro Gln Gly His Phe Cys Gly Gly Ala Leu Ile 340 345 350
- His Pro Cys Trp Val Leu Thr Ala Ala His Cys Thr Asp Ile Lys Thr 355 360 365
- Arg His Leu Lys Val Val Leu Gly Asp Gln Asp Leu Lys Lys Glu Glu 370 375 380
- Phe His Glu Gln Ser Phe Arg Val Gln Lys Ile Phe Lys Tyr Ser His 385 390 395 400
- Tyr Asn Glu Arg Asp Glu Ile Pro His Asn Asp Ile Ala Leu Leu Lys 405 410 415

- Leu Lys Pro Val Asp Gly His Cys Ala Leu Glu Ser Lys Tyr Val Lys 420 425 430
- Thr Val Cys Leu Pro Asp Gly Ser Phe Pro Ser Gly Ser Glu Cys His 435 440 445
- lle Ser Gly Trp Gly Val Thr Glu Thr Gly Lys Gly Ser Arg Gln Leu 450 460
- Leu Asp Ala Lys Val Lys Leu Ile Ala Asn Thr Leu Cys Asn Ser Arg 465 470 475 480
- GIn Leu Tyr Asp His Met IIe Asp Asp Ser Met IIe Cys Ala Gly Asn 485 490 495
- Leu Gln Lys Pro Gly Gln Asp Thr Cys Gln Gly Asp Ser Gly Gly Pro $500 \hspace{1cm} 505 \hspace{1cm} 510$
- Leu Thr Cys Glu Lys Asp Gly Thr Tyr Tyr Val Tyr Gly lle Val Ser 515 520 525
- Trp Gly Leu Glu Cys Glu Lys Arg Pro Gly Val Tyr Thr Gln Val Thr $530 \hspace{1cm} 535 \hspace{1cm} 540 \hspace{1cm}$
- Lys Phe Leu Asn Trp IIe Lys Ala Thr IIe Lys Ser Glu Ser Gly Phe $545 550555$